

Work Order ID 148766

Wednesday, July 06, 2016 3:55:49 PM

148766

ship July 27

ASAP

Page 1

Item ID: D4964-043

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Mid Step Leg Assembly

Start Date: 7/7/2016 Start Qty: 2.00

5 1 SA
2 1

Cust Item ID:

Required Date: 7/12/2016 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: dem

Date: 16/07/16

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4964	A

100		0.00							
100	Small Fab								
Small Fab	Memo	0.12							
Small Fab	Assemble as per Dwg D4964								

1X 16/07/18

DAS
36
9-89

110		0.00							
110	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.01							
Quality Control									

1 38 9-89
JUL 19 2016

120		0.00							
120	White Gloss(Ref:4.3.5.1) per OSI005 4.3-Alum								
Powdercoat	Memo	0.06							
Powder Coating	START TIME: <u>7:15</u>								
	OVEN TEMPERATURE: <u>300</u>								
	FINISH TIME: <u>7:45</u>								

1 16-07-20 2389

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Work Order ID 148766

Wednesday, July 06, 2016 3:55:49 PM

148766

Page 2

Item ID: D4964-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Mid Step Leg Assembly
Start Date: 7/7/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 7/12/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				1			DAS 38 9-89 JUL 20 2016
140 *140* Packaging Packaging	Identify as per dwg & Stock Location: St 200 Memo	0.00 0.00							DAS 6 9-89 JUL 21 2016
150 *150* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.03							DAS 21 9-89 JUL 22 2016

DAS
21
9-89
JUL 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY								
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐			Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐			Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER : ☐								

Picklist Print

Wednesday, July 06, 2016 3:55:49 PM

Page 1

Work Order ID: 148766

148766

Parent Item: D4964-043

D4964-043

Parent Item Name: Mid Step Leg Assembly

Start Date: 7/7/2016

Required Date: 7/12/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 13.11.05 NEW ISSUE DD VERF:JFS IPP
REV:B 14.01.10 AS PER DWG REV.A DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4964-1		Manufactured	No				Each	4.0000		4			
D4964-1									**			16/07/11	DAS 36 9-89
Step Leg													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				GA				4					
					132122			4		2			
D4965-3		Manufactured	No				Each	2.0000		2			
D4965-3									**			16/07/11	DAS 36 9-89
Step Spacer													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				GA				2					
					131225			2		2			
D4965-7		Manufactured	No				Each	3.0000		4			
D4965-7									**			16/07/11	DAS 36 9-89
Step Spacer													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				GA				3					
					116188			1					
					131226			2		2			
MS20470AD4-5		Purchased	No				Each	2,298.000		48			
MS20470AD4-5									**			16/07/11	DAS 36 9-89
RIVET, UNIVERSAL HEAD													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				GA				780					
					m133860			780					
				ST310				1518					
					m134654			1518					

M134848

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

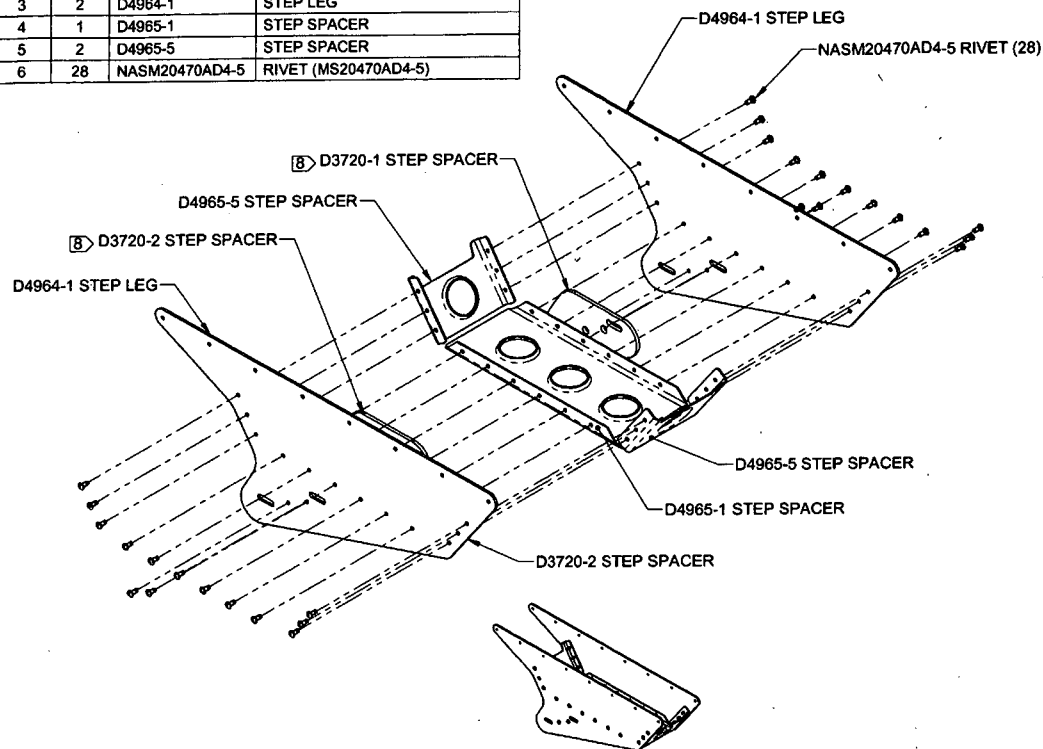
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4964-041	MID STEP LEG ASSY
1	1	D3720-1	STEP SPACER
2	1	D3720-2	STEP SPACER
3	2	D4964-1	STEP LEG
4	1	D4965-1	STEP SPACER
5	2	D4965-5	STEP SPACER
6	28	NASM20470AD4-5	RIVET (MS20470AD4-5)

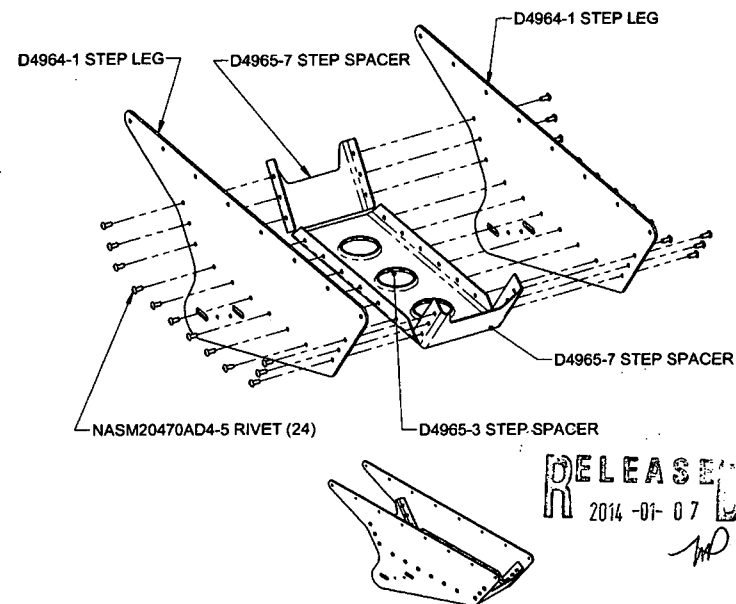
ITEM	QTY -043	P/N	DESCRIPTION
	X	D4964-043	MID STEP LEG ASSY
1	2	D4964-1	STEP LEG
2	1	D4965-3	STEP SPACER
3	2	D4965-7	STEP SPACER
4	24	NASM20470AD4-5	RIVET (MS20470AD4-5)



D4964-041 MID STEP LEG ASSEMBLY
(FOR D350-591-121/-122 STEP MOD KITS)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "GLOSS WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4964-041" OR "D4964-043" PER DART QSI 044 6.1
- 7) WEIGHT: 0.44 lbs
- 8) D3720-1/-2 STEP SPACERS MOUNTED WITH COUNTERSUNK HOLES TO THE INSIDE OF ASSEMBLY. GRIND RIVETS FLUSH TO INSIDE SURFACE.



D4964-043 MID STEP LEG ASSEMBLY
(FOR D350-591-213/-214/-311/-312 STEP MOD KITS)

APPROVED	A NEW ISSUE		DB	13.10.24
	REV.	DESCRIPTION		BY DATE
	DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	DB		
	CHECKED	MB	DRAWING NO.	REV. A
	MFG. APPR.	DD	D4964	SHEET 1 OF 2
	APPROVED	MP	TITLE	SCALE
	DE APPR.	DS	MID STEP LEG ASSY	NTS
DATE		13.12.18	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CONSIDERED COMMINGLED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

w/o 148766

2m 16/01/06

